electromagnetic force acting on said conductors is directed substantially normal to said surface of said planar diaphragm.

12. Diaphragm transducer according to claim 11, wherein said conductors are arranged in a pattern with varying mutual distances and directions.

13. Diaphragm transducer according to claim 11, wherein that said magnetic field through said diaphragm is approximately constant.

14. Diaphragm transducer according claim 11, wherein said magnetically conducting material is configured as plates, between which permanent magnets are located, where one edge of each of said plates constitutes a magnetic pole for providing field strength through said diaphragm.

15. Diaphragm transducer according to claim 14, wherein the number of poles are at least three with two outer poles and at least one inner pole.

16. Diaphragm transducer according to claim 15, wherein said number of inner poles located between the outer poles is at least two, where said inner poles are arranged in pairs of poles with a distance between the two plates constituting said pair.

17. Diaphragm transducer according to claim 16, wherein said distance between said two plates constituting a pair of poles, is between 0.1 and 3 mm, preferably between 0.3 and 1.5 mm and preferably between 0.4 and 0.6 mm.

18. Diaphragm transducer according to claim 11, wherein said magnetically conducting material is soft iron

19. Diaphragm transducer according to claim 11, wherein said diaphragm comprises a magnetically conducting layer.

20X0. Diaphragm transducer according to claim 19, wherein said magnetically conducting layer comprises at least one from the group consisting of a coating with soft iron and a coating with Permalloy.--

Respectfully submitted,

By: _____
David S. Safran
Registration No. 27,997

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, VA 22102
(703) 790-9110
(703) 883-0370 (fax)